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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,383	07/15/1999	TOSHIHIRO SHIMA	Q55113	3442

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SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 200373202

EXAMINER

POON, KING Y

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/353,383	SHIMA, TOSHIHIRO
	Examiner	Art Unit
	King Y. Poon	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 May 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 21-36 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 11-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 November 2003 and 21 September 1999 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. Claims 1-10, 21-36 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/18/2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 11-13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase (US 6,184,996) in view of Zimmerman et al (US 5,490,237).

Regarding claim 11: Gase teaches a printer (printer 14, column 3, line 12) comprising: a job request section (the software code of the browser program that request print job, column 3, lines 25-30) for demanding job data (text of print job, column 3, lines 25-30) of a print job from a host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) having the job data; and a printing section (the software code of the program of the printer that controls the printer to received the transmitted text of a print job, column 3, lines 25-30, and the software code that controls the printer to print the text) for receiving and printing the job data sent from the host computer in response (response, column 3, line 29) to a request (request, column 3, line 27) from the job request section.

Note: Column 5, lines 1-10, Gase teaches the printer is controlled by software procedures. It is inherent that different procedures of the printer are controlled by different software code.

Gase does not teach the details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

Zimmerman, in the same area using a printer for printing, shows the detail of a printer having a print engine, (column 5, line 29) a receive buffer memory, (column 5, lines 35-36) and wherein the host computer sends the print job to the printer according to a condition of said print engine (the print engine must be ready to print after 40 % of the print data is being stored) and said receive buffer memory (the memory must have space for the transmitted print job).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Zimmerman because of the following reasons: (a) it would have provide a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a

buffer; and (c) it would have prevented the print engine from stopping during printing which will degrade the print quality.

Regarding claim 12: Gase teaches wherein the job request section receives job location data (received URL, column 3, lines 15-20) showing a location of the job data (column 3, lines 18-20) from a print server, (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) and the job request section sends a job request (request, column 3, line 27) to the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) which the job location data shows (column 3, lines 15-30).

Regarding claim 13: Gase teaches the printer further comprising a print server (job queue 28, column 3, lines 24) for receiving job location data (URL, column 3, line 30-35) showing a location (located, column 3, line 28) of the job data (text of print job, column 3, line 27, column 3, line 29) from the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs are temporarily) wherein the job request section (the software code of the browser program that request print job, column 3, lines 25-30) sends the job request (column 3, lines 25-30) to the host computer (client processor, column 3, lines 27, that the print job

is located, column 3, lines 5-8) which the job location data (URL, column 3, lines 24-26) stored in the print server (job queue 28, column 3, lines 24) shows.

Regarding claim 16: Gase teaches a method of operating a printer, (printer 14, column 3, line 12) comprising steps of demanding job data (sending job request, column 3, lines 25-30) of a print job from a host computer (client processor that sends the text of a print job, column 3, lines 25-30) having the job data (text of a print job, column 3, lines 29-30); and receiving and printing the job data (column 3, lines 28-30) sent from the host computer (client, column 3, line 28) in response to a job request (request, column 3, line 27) of the demanding step.

Gase does not teach the details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

Zimmerman, in the same area using a printer for printing, shows the detail of a printer having a print engine, (column 5, line 29) a receive buffer memory, (column 5, lines 35-36) and wherein the host computer sends the print job to the printer according to a condition of said print engine (the print engine must be ready to print after 40 % of the print data is being stored) and said receive buffer memory (the memory must have space for the transmitted print job).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job

request to the host computer according to a condition of the engine and the receive buffer memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Zimmerman because of the following reasons: (a) it would have provided a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a buffer; and (c) it would have prevented the print engine from stopping during printing which will degrade the print quality.

Regarding claim 17: Gase teaches a step of receiving job location data (URL, column 3, line 20) lines showing a location of the job data (column 3, lines 27-28) from a print server (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), wherein in the step of demanding, the job request (request, column 3, lines 26-27) is sent to the host computer (client processor, column 3, lines 28-30) which the job location data shows. (Column 3, lines 25-30)

Regarding claim 18: Gase teaches a step of receiving job location data (received URL, column 3, lines 17) showing a location of the job data (column 3, lines 25-30) from the host computer (client processor, column 3, line 27) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs

is temporarily) wherein, in the step of demanding, the job request is sent to the host computer which the stored job location data shows (column 3, lines 25-30).

4. Claims 14, 15, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase in view of Zimmerman as applied to claims 11, 16 above and further in view of Pipeline Corporation (column 1, lines 48-60, Gase).

Regarding claim 14: Gase does not teach wherein the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 15: Gase does not teach the printer further comprising means which a location of each part constituting the job data is informed from the host computer, wherein the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a

printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: means/software code such that the printer would allow the location of each part constituting the job data to be informed from the host computer; the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 19: Gase does not teach wherein, in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 20: Gase does not teach a step of being informed of a location of each part constituting the job data from the host computer, wherein, in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer to include: a step of being informed of a location of each part constituting the job data from the host computer; in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part; and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer because of the following reason: (a) it would have allowed users to access the page of a

document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Response to Arguments

5. Applicant's arguments filed 11/2/2004 have been fully considered but they are not persuasive.

With respect to applicant's argument that Zimmerman does not teach send a job request to the host computer 10; therefore, Zimmerman does not teach a job request is sent to the host computer according to a condition of the print engine and the received buffer memory, has been considered.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Gase teaches a printer (printer 14, column 3, line 12) comprising: a job request section (the software code of the browser program that request print job, column 3, lines 25-30) for demanding job data (text of print job, column 3, lines 25-30) of a print job

from a host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) having the job data.

From Gase teaching, the print data would not be sent without a job request being sent to the host computer. Therefore, the system of Gase or the combination of Gase and Zimmerman's system would not be working without the job request being sent to the host because no print data would be sent back to the printer without the job request.

Gase does not teach the details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

Zimmerman, in the same area using a printer for printing, shows the detail of a printer having a print engine, (column 5, line 29) a receive buffer memory, (column 5, lines 35-36) and wherein the host computer sends the print job to the printer according to a condition of said print engine (the print engine must be ready to print after 40 % of the print data is being stored) and said receive buffer memory (the memory must have space for the transmitted print job).

From Gase's teaching, it does not make sense for the print data, in any system, to be sent to the printer when the print engine and print buffer condition of the print system would result in printing garbage (degraded print quality). Doing so is a waste of resources and money and at the same time, destroying environment- the wasted papers are generated by destroying trees.

Therefore, in according to Gase and Zimmerman, the print data is to be transmitted to the printer according to a condition of the print engine and the receive buffer memory; the print data cannot be transmitted without a print request being sent to the host.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Zimmerman because of the following reasons: (a) it would have provide a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a buffer; and (c) it would have prevented the print engine from stopping during printing which will degrade the print quality.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

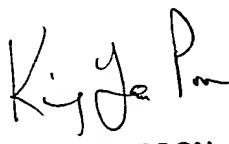
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KING Y. POON
PRIMARY EXAMINER

August 9, 2005